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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,600	09/18/2003	Robert J. Nealon	LUC-421/Nealon 2	8545
32205	7590	08/25/2011	EXAMINER	
Carmen Patti Law Group, LLC One N. LaSalle Street 44th Floor Chicago, IL 60602			ROBERTS, BRIAN S	
			ART UNIT	PAPER NUMBER
			2466	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/666,600	Applicant(s) NEALON, ROBERT J.	
	Examiner BRIAN ROBERTS	Art Unit 2466	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 June 2011.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on ____; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 5) ☒ Claim(s) 2-5 and 12 is/are pending in the application.
- 5a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 6) ☐ Claim(s) ____ is/are allowed.
- 7) ☒ Claim(s) 2-5 and 12 is/are rejected.
- 8) ☐ Claim(s) ____ is/are objected to.
- 9) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

- Claims 2-5, and 12 remain pending.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2-3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- In reference to claim 2

Claim 2 recites the limitation "the switching of the call" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim. Parent claim 12 is directed at a system for switching individual packets and fails to recite "switching of a call". Furthermore, assuming the limitation was intended to be directed at switching individual AAL2 CPS-packets as recited in lines 13-14 of parent claim 12, lines 8-9 of parent claim 12 already recite that the algorithm takes into account atleast "a current state of each of the plurality of transcoders and a current load of all of the plurality of transcoders".

- In reference to claim 3

Claim 3 recites the limitation "the switching of the call" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim. Parent claim 12 is directed at a system for switching individual packets and fails to recite "switching of a call".

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 2-5, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jormanainen et al. (US 2003/0165143) in view of Denti et al. (US 6208657).

- In reference to claim 12

Jormanainen teaches a system for using asynchronous transfer mode adaptation layer 2 (AAL2) switching within a wireless access gateway (*e.g. RNC, par. 0058*) comprising:

- a plurality of external AAL2 permanent virtual circuits (*e.g. AAL2 Permanent Virtual circuit to/from BS to ATM switch of Figure 1; par. 0044*);
- a plurality of internal AAL2 PVCs (*e.g. AAL2 Permanent Virtual circuits between internal components of the ATM switch of Figure 1; par. 0044-0045*);
- a plurality of transcoders (*e.g. Configurable Dynamic Signal Processing units of signal processing unit 10 for transcoding services; par. 0048-0050*);
- at least one intermediate node (*e.g. AAL2 service unit 9; par. 0037, 0057*) operatively connected to the plurality of external AAL2 PVCs and to the internal AAL2 PVCs;
- a single packet switch control (*e.g. AAL2 connection control unit 8; par. 0037*) operatively connected to the at least one intermediate node, the plurality of internal AAL2 PVCs and the plurality of transcoders;

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- wherein the single packet switch control is structured to utilize a algorithm to instruct the at least one intermediate node to switch individual AAL2 common part sublayer (CPS)-packets (*i.e. AAL2 switching inherently involves switching of CPS packets*) from the external AAL2 PVCs to the internal AAL2 PVCs (*par. 0046, 0056-0057*),
- the single packet switch control is structured to allocate individual channel identifiers (CIDs) to transcoder channels on an as needed basis (*i.e. CIDs which are utilized for the AAL2 switching are allocated to the Permanent Virtual circuits between the AAL2 service unit 9 and the Configurable Dynamic Signal Processing units of signal processing unit 10 on a as needed basis; par. 0046, 0056-0057*)
- and the single packet switch control is structured to effect switching of individual packets from the external AAL2 PVCs and to the internal AAL2 PVCs (*see Figure 2, par. 0046, 0056-0057*)

Jormanainen does not teach that the single packet switch control is structured to utilize an algorithm that takes into account at least a current state of each of the plurality of transcoders and a current load of all of the plurality of transcoders or that the single packet switch control is structured to effect the switching of the individual packets from the external AAL2 PVCs and to the internal AAL2 for an even distribution of load among the transcoders even if a load on an external AAL2 PVCs is uneven.

Dendi et al. teaches a single packet switch control (*e.g. resource manager 560; col. 15 lines 1-7*) structured to utilize an algorithm that takes into account at least a current state of each of a plurality of processing units (*e.g. processing units 525, 535; col. 15 lines 1-7*) and a current

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load of all of the plurality of transcoders (*col. 15 lines 32-52*), and effect an even distribution of load among the transcoders (*col. 15 lines 32-52*).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the single packet switch control of Jormanainen to utilize an algorithm that takes into account at least a current state of each of the plurality of transcoders and a current load of all of the plurality of transcoders and be structured to effect the switching of the individual packets from the external AAL2 PVCs and to the internal AAL2 for an even distribution of load among the transcoders even if a load on an external AAL2 PVCs is uneven as suggested by Dendi et al. because it would prevent overloading a first transcoder while a second transcoder is under-utilized and prevents switching of packets to a transcoder that is unavailable because of a failure.

- In reference to claim 2, as best understood

The combination of Jormanainen and Dendi et al. teaches a system that covers substantially all limitations of the parent claim. As described in the rejection of claim 12, the combination of Jormanainen and Dendi et al. teaches the single packet control is structured to switch CPS packets of a call to any one respective transcoder of available transcoders based upon an algorithm that takes at least one of a state of each respective transcoder, and a current load on the plurality of transcoders.

- In reference to claim 3, as best understood

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The combination of Jormanainen and Dendi et al. teaches a system that covers substantially all limitations of the parent claim. Jormanainen further teaches switching of CPS packets of a call to any one respective transcoder of available transcoders is on an as needed basis (*par. 0046, 0056-0057*).

- In reference to claim 4-5

The combination of Jormanainen and Dendi et al. teaches a system that covers substantially all limitations of the parent claim. As described in the rejection of claim 12, the combination of Jormanainen and Dendi et al. teaches a plurality of digital signal processor (DSP) channels is formed by a set of internal AAL2 PVCs between the intermediate node and a set of transcoders (*AALS Permanent Virtual circuits between the AAL2 service unit 9 and the Configurable Dynamic Signal Processing units of signal processing unit 10; Jormanainen par. 0046, 0056-0057*), and wherein an allocation of a respective DSP channel, of the plurality of DSP channels for a call is a function of at least one predetermined parameter the at least one predetermined parameter comprises at least one of a state of the set transcoders, a current load on the set of transcoders, and a state of the set of internal AAL2 PVCs (*as explained in the rejection of claim 12 based on the combination of Jormanainen and Dendi et al; Dendi et al col. 15 lines 1-7, 32-52*).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

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- US 7266122
- US 6266342 (Note: Fig. 3, col. 12 line 36 - col. 13 line 14)
- US 6891833 (Note: Fig. 6)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRIAN ROBERTS whose telephone number is (571)272-3095.

The examiner can normally be reached on M-F 10:00-7:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, DANIEL RYMAN can be reached on (571) 272-3152. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Brian Roberts/
Examiner, Art Unit 2466
08/24/2011